Geurts: Weapons Elevator Experts Being Assembled for Ford Class Carriers

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The USS Gerald R. Ford steams in the Atlantic Ocean on Oct. 27. U.S. Navy/Mass Communication Specialist 3rd Class Connor Loessin

ARLINGTON, Va. – The U.S. Navy's top acquisitions official said all advanced weapons elevators (AWE) on the new aircraft carrier USS Gerald R. Ford will be operational by 18 months after post-delivery trials and testing begins and that a team of experts will be formed to carry over lessons learned as the AWEs are installed in each new carrier of the Ford class.

James F. Geurts, assistant secretary of the Navy for research, development and acquisition, told media at an Oct. 28 Pentagon roundtable that Huntington Ingalls' Newport News Shipbuilding will form a team of experts on the installation and repair of the AWEs that will carry over as the next three carriers (CVNs 79, 80 and 81) follow the Gerald R. Ford in construction. The Navy will form a team of AWE experts to certify the installation.

The AWEs are one of five major technologies introduced on the Ford and have proven to be the most troublesome. The ship's dual band radar, electromagnetic aircraft launch system and advanced arresting gear and new-design nuclear reactor are all doing well in trials, but the 11 AWEs – crucial to bringing ordnance up to the flight deck rapidly enough to provide the carrier's design sortie generation rate – have proven difficult to install and operate.

Geurts, who visited the Gerald R. Ford at sea on Oct. 27, said the Navy has certified the three upper AWEs (plus one utility or medevac elevator). Newport News Shipbuilding is working on the seven elevators that operate from the ship's two weapons magazines.

He said that seven remaining AWEs will be installed and certified in sequence to allow access to both the fore and aft magazines to ensure that both are accessible as early as possible as redundancy develops. Three of the lower AWEs were exercised during the carrier's first at-sea period this year while Geurts was visiting the ship in preparation for certification.

The goal for the Navy is to have all 11 AWEs operational by the time the 18-month post-delivery trials and testing is completed in mid-2021.

During the testing, the carrier will be put through several trials, including re-certification of its flight deck, the arresting gear, the catapults, fuel system and many other systems.

During the recent trials attended by Geurts, the Ford's propulsion plant was tested at full throttle. "The propulsion plant activities are looking pretty solid," he said.

Geurts said the Navy is building a full digital twin of the AWE and is building a land-based test site for it at Naval Surface Warfare Center Philadelphia to troubleshoot any AWE issues. He said that adjusting the AWEs for the next carrier, John F. Kennedy, will not require a huge amount of work.